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**THE THEORY OF CAPITALIST REGULATION
AND THE DEVELOPMENT OF AMERICAN HIGHER EDUCATION**

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The paper outlines a neomarxist theoretical framework for interpreting the history of American higher education. The author argues that one can best explain the development of American higher institutions as part of a theory of capitalist development, because higher institutions are generally dependent on external patronage and, therefore, on the capitalist class. Drawing on Aglietta's "theory of capitalist regulation," the author suggests that a competitive, corporate, and state-capitalist phase of development have each resulted in a different structural form of higher education. Each structural form is characterized by its own types of governance, administration, curriculum, and teaching linked to the economic, cultural, and political interests of an ascendant segment of the capitalist class.

THE THEORY OF CAPITALIST REGULATION AND THE DEVELOPMENT OF AMERICAN HIGHER EDUCATION

The Concept of Financial Hegemony

A radical historiography of higher education was first suggested by Karl Marx and Frederick Engels in The German Ideology. Marx and Engels pointed out that the full-time pursuit of intellectual activities depends on the ability to secure access to a "material means of mental production."¹ In other words, the economic foundation of a college or university is its ability to pay salaries, support libraries, build classrooms, and provide research funds to its scholars. However, it is a simple fact that colleges and universities have never been financially self-sufficient. Indeed, as Roger L. Geiger has recently noted, all higher institutions have "ultimately had to depend upon external sources of patronage."²

It is hardly controversial in this context to observe that insofar as private capital is the chief source of wealth in a capitalist society, it is also likely to be the chief source of patronage. However, it is no doubt more controversial to argue that virtually everything which goes on in a college or university, therefore, depends upon the presence and continuity of the capital accumulation process.³ Nevertheless, the main thesis of a neomarxist historiography is that because higher institutions are generally dependent on the capital accumulation process, one can best explain the development of American higher

institutions as part of a theory of capitalist development. More specifically, neomarxist theory predicts that under normal circumstances "the class which has the means of material production at its disposal has control at the same time over the means of mental production" and this ability to control patronage will enable an economically dominant class to "regulate the production and distribution of the ideas of their age."⁴

The Theory of Capitalist Regulation

Neomarxist economists have often observed that besides the normal business cycle associated with short-term booms and busts, capitalist economies undergo patterns of expansion known as long-waves of capital accumulation.⁵ Unlike the peaks and valleys of the normal business cycle, longwaves are characterized by several decades of robust and profitable economic expansion. Paul A. Baran and Paul M. Sweezy argue that each long-wave of capitalist development has been fueled by the introduction of an "epoch-making innovation" that revolutionizes production and creates new opportunities for profitable investment; first, the cotton gin, next the railroad, followed by the automobile and, finally, the computer.⁶ Ultimately, however, each phase of capitalist development grinds to an end as the rate of profit on new investments starts to fall.⁷

However, the "regulationist school" of neomarxist theory has recently begun to point out that each longwave is also supported by an interconnected matrix of social and political institutions

called a "regime of accumulation." The regulationists have emphasized that while epoch-making innovations may fuel longwaves of capitalist development, the process of capital accumulation can be sustained only to the extent that cultural values, forms of business organization, government policy, law, and educational processes are compatible with the requirements of each phase in the accumulation process.⁸ In this respect, the "non-economic" institutions of society "regulate" the historical process of capitalist development by maintaining or altering patterns of domination by the capitalist class.⁹

Three regimes of accumulation have been identified in the United States, with each regime marked by the hegemonic ascendancy of a particular type of capitalist.¹⁰ A competitive regime, in which merchant capital was ascendant, existed from 1815 to the mid-1890s. The competitive mode of accumulation was centered on small enterprises utilizing a craft-based labor process and producing mainly for local markets. During this period, economic expansion was primarily linked to population growth and the westward migration.¹¹ A corporate regime, centered in the hegemonic ascendancy of industrial capital, assumed dominance from the 1890s until the end of World War II. The corporate mode of accumulation was characterized by the emergence of monopolistic industrial enterprises, standardized mass production, and the Taylorization of labor processes. During this period, economic growth was sustained by the rationalization of enterprises and by the planned expansion of consumer demand.¹² Finally, from World War II to present, the

hegemony of finance capital was institutionalized in a state-capitalist regime. The state-capitalist mode of accumulation has been structured, first, on a partnership between government and monopoly capital and, second, on a series of historic "accords" or class compromises embodied in institutions such as peaceful collective bargaining. During this period, economic growth has been increasingly sustained by state spending on military procurements and state subsidies to offset the rising costs of private sector production.¹³

An "accumulation crisis" always marks the prelude to a transition from one regime of accumulation to another stage of capitalist development.¹⁴ As with long-waves, David Kotz emphasizes that accumulation crises are more than short-term declines in business profitability. An accumulation crisis, as conceived by regulationist theory, is a long-term structural crisis that "involves a significant reduction in the rate of accumulation over a prolonged period of time."¹⁵ The movement to institutionalize a new accumulation regime is thus the culmination of a significant long-term tendency for the rate of profit to fall.

A key hypothesis of regulationist theory is that as the mode of accumulation changes, (e.g., from competitive to corporate), non-economic institutions (i.e., the superstructure) which once supported the process of capital accumulation and class hegemony eventually become fetters on the process of capitalist development. Thus, the theory of capitalist regulation explains accumulation crises primarily as the result of emerging

disjunctures between the changing structural requirements of capitalist accumulation and the organization or policies of supporting institutions such as government and education. As a result, newly ascendant fractions of the capitalist class find that social institutions (e.g., the family), cultural orientations (e.g., consumerism), governmental institutions, and educational policies must all be reconstructed to catalyze and support a new long-wave of economic growth. Consequently, business leaders not only reconstruct the existing forms of business organization and create new labor processes, they also initiate movements to redesign the supporting cultural, political, and social institutions necessary to sustain a new mode of accumulation.

It should be emphasized that the reestablishment of a functional relation between capital accumulation and supporting institutions never occurs automatically nor, therefore, without organized resistance both from competing classes and declining fractions of capital. The interests of antagonistic classes, such as labor or agriculture, compete for hegemonic ascendancy by seeking to reconstruct the same (or alternative) political, cultural, and social institutions. Likewise, declining fractions of capital, as well as declining classes, seek to preserve their waning hegemony by defending institutions that obstruct the emergence a new accumulation regime. Consequently, accumulation crises tend to produce intense periods of class struggle that extend across a wide field of economic, political, and cultural institutions. In this sense, the regulationists argue, one

cannot explain the historical development of those same social, political, and cultural institutions without analyzing their historical relation to the capital accumulation process and, hence, to the processes of class formation and class struggle.¹⁶

Capitalist Regulation and Higher Education

The history of American higher institutions can be linked to the general process of capitalist development in two ways. First, as Thorstein Veblen observes, a university consists "of mature scholars and scientists, the faculty - with whatever plant and other equipment may incidentally serve as appliances for their work."¹⁷ In this respect, the college or university establishes both an economic and a legal relationship between a society's "intellectuals" and the tangible property necessary to engage in full-time intellectual pursuits.

Adam Smith notes that as a historical institution, the college and university originated in the craft-based labor processes of the medieval guilds. Indeed, in The Wealth of Nations, Smith observes that all incorporations -- whether of scholars, bakers, smiths, or tailors -- "were anciently called universities, which indeed is the proper Latin name for any incorporation whatever."¹⁸ Although this concept of the university was imported from Europe, and even advocated in some early legal disputes, the Dartmouth College Case (1816) established that the American college was a modern corporation and not a medieval craft guild.¹⁹ Consequently, the Dartmouth

College Case institutionalized "capitalist" property relations by designating governing boards as the fiduciary trustees (i.e., "owners") of the college and university.

Second, because the accumulation of capital by a college or university is nearly always dependent upon external patronage, higher institutions must orient their activities toward fulfilling the higher educational requirements of the dominant accumulation regime. To the extent that higher institutions are dependent on their ability to attract external capital, ascendant or hegemonic fractions of the capitalist class can utilize their patronage as leverage to construct higher institutions that facilitate a particular accumulation regime. Hence, the development of American higher education can be explained both in terms of the internal operational requirements of each mode of accumulation and by its institutional role in sustaining each accumulation regime.

Therefore, it is my contention that a specific structural form of higher education is linked to each of the three accumulation regimes. A structural form is a network of social relations, organized through institutions, that are the historical products of class struggle.²⁰ The college and university institutionalize structural forms of higher education that consist of five social relations to production: 1. a mode of accumulation, 2. a governance process, 3. an administrative process, 4. a curriculum, and 5. a labor process (i.e., teaching and research). Moreover, to the extent that the mode of accumulation conditions the other four processes, and is itself

dependent on the external accumulation regime, the development of American higher institutions moves in tandem with the development of accumulation regimes.²¹

The mode of accumulation (i.e., competitive, corporate, state-capitalist) constrains the other four processes because of their dependence on the accumulation process.²² Colleges and universities can pursue educational objectives (e.g., curriculum development) only to the extent that they accumulate the necessary educational capital. To the extent that educational capital must be partly accumulated through patronage, higher institutions must depend on the "goodwill" of those classes who control a society's scarce material resources. The financial hegemony this gives to a dominant class, or class fraction, enables them to command a role in the governance of higher institutions.

Thorstein Veblen observes that the governance process in higher education consists of two roles.²³ The fiduciary role of governance is to secure adequate revenue for current operating expenses and to allocate that revenue (after fixed costs) to support the administrative process and the labor process (i.e., teaching and research). The ideological role of governance is to define a college or university mission and to facilitate, supervise, and implement curriculum that achieves this mission.

It is important to note that since the production process in higher education (i.e., curriculum development, teaching, and research) is irreducibly "mental," it cannot be "controlled" through the governance or administrative processes. In other

words, a board of trustees, a private foundation, or the state cannot directly control the teaching and research that takes place in a college and university. Certainly, governance and administrative institutions cannot dictate the subjective thought processes of individual teachers or scholars. Instead, the governance and administrative processes must be understood as methods for regulating educational production, rather than as mechanisms for directly controlling research and teaching.

The regulation of academic production relies on a combination of prescriptive regulators and incentive regulators.²⁴ Prescriptive regulators consist of disciplines and punishments designed to force individuals to adopt patterns of conduct that conform to the educational mission of a college or university. The most powerful prescriptive regulator is termination and expulsion. However, a variety of disciplinary prescriptions are available short of termination, such as denial of promotion and raises, sabbaticals, and research grants. While prescriptive regulators never succeed wholly in regulating the intellectual workforce, they raise the costs associated with dissent and thus minimize the occurrence of "dysfunctional" forms of thought and behavior. Although it is an unpopular idea even in contemporary marxist theory, academic repression has been a regular feature of American higher education and it continues in various forms even today.²⁵

However, one can only coerce so much compliance through prescriptive regulators. The fact remains that unlike reorganizing a factory labor process, college governance can

rarely force people to develop and teach new curriculum or to do specific types of research. On the other hand, the governance and administrative processes can offer institutional, political, and market inducements to encourage or facilitate the development of the desired curriculum, teaching, and research. These types of incentive regulators include money, security, prestige, and/or the power attached to various activities like corporate and government consulting. The objective behind inducement regulators is to motivate individuals to work towards institutional ends (as opposed to personal goals) and, ultimately, by an asymmetrical distribution of inducement regulators to institutionalize a process of self-selection where personal motivations and "systemic" goals become identical. Moreover, the recipients of such inducements will naturally excel academically because grants, student assistants, release time, sabbaticals, and fellowships allow them the time and resources to excel. Therefore, individuals who come to internalize the institutional mission of a structural form of higher education quickly rise through academic and administrative ranks, while those who are denied inducements tend to be eliminated on "purely academic" grounds if not by overt prescription.²⁶

In this manner, the governance process enables those who control educational capital to initiate, facilitate, or obstruct competing forms of administration, curriculum development, and teaching through asymmetrical allocations of inducement regulators. Again, it is important to emphasize that

a process of capitalist regulation does not mean that everyone associated with higher education readily complies with the goals of capitalists, or that everyone pursues a purely economic motive, but it does mean that counter-tendencies are constrained in their effectiveness by the financial hegemony and political dominance of the capitalist class.²⁷ Thus, the regulatory structure of a higher educational form is "capitalist" to the extent that it confers asymmetrical benefits on students and educators that serve the interests of the capitalist class, while meting out disproportionate prescriptive regulators to those who oppose them. Hence, Ralph Miliband points out that class hegemony is established not by the elimination of competition or class struggle, but from a pattern of competition that is "so unequal as to give a crushing advantage to one side against the other."²⁸

Capitalist Development and Higher Education

The theory of capitalist regulation anticipates that one should be able to identify three structural forms of higher education in the United States linked to the three accumulation regimes discussed earlier. Thus, one should be able to periodize higher education development in terms of a competitive, corporate, and state-capitalist regime. Moreover, to the degree that a mode of accumulation conditions governance, administration, curriculum, and the labor process, the internal development of higher institutions will be linked to shifts in

the mode of accumulation (See Table 1). From this perspective, the major periods of higher educational change can be explained as structural adjustments in finance, mission, governance, curriculum, and scholarship that meet the changing economic, cultural, and political requirements of a new phase of capitalist development. While there is always resistance from within institutions, as well as challenges from competing classes, the financial hegemony of capital always places it in an asymmetrical power location relative to the higher institutions that are dependent upon its patronage.

For instance, in the period of competitive capitalism (1815-1896), the denominational movement was the major developmental thrust in American higher education.²⁹ During this period, hundreds of small, locally oriented, liberal arts colleges were established because of denominational competition and through individual patronage. The religious mission of the early denominational colleges was reinforced by a mode of accumulation that relied mainly on the patronage of poor church congregations, denominational organizations, and the occasional charitable endowment.

The early governance process was centered on local governing boards that consisted of churchmen and merchant capitalists. The social composition of governing boards was dictated first, by the requirements of religious orthodoxy and, second, by the requirements of competitive accumulation. As Veblen notes, the governing churchmen exercised an ideological role by enforcing academic conformity to the orthodox opinions and observances of

the particular denomination. Hence, regulatory inducements and administrative prescriptions were distributed to maintain a tradition of "cultural literacy" associated with the local standing order of clergy and merchant capital.³⁰ Brubacher and Rudy conclude that when one examines the ideological patterns of the early denominational college, there is "little evidence of anything new or radical...In curriculum, pedagogy, philosophy, and theology, their aim was to maintain, not upset, the status quo."³¹ Moreover, to the extent that the academic labor process continued to be organized informally as a medieval guild, the labor process tended to preserve and transmit the established cultural orthodoxies of a local Protestant establishment.³²

At the same time, clerical governing bodies were also expected to fulfill their fiduciary role by appealing to impecunious congregations for educational funds. Since governing boards met infrequently, and provided only limited access to patronage, charismatic presidential leadership was often necessary to generate financial support from the local community or from denominational headquarters. Thus, as Brubacher and Rudy suggest, the governing requirements of competitive accumulation resulted in an administrative process where "the success or failure of a particular college often depended on the specific abilities of the individual serving as president."³³ Nevertheless, as Veblen points out, it was always held "to be expedient in case of emergency to have several wealthy men identified with the governing board, and such men of wealth are also commonly businessmen."³⁴ Moreover, in the competitive phase

of capitalist development, such men are most commonly merchant capitalists and, in fact, merchant capitalists predominate among the businessmen on early governing boards.³⁵

The early development of higher education was thus driven by denominational competition, but it was constrained by the limitations of competitive accumulation. The competition for scarce students meant that most denominational colleges had to follow one of two developmental strategies. If institutions retained their original cultural mission, they had to rely, first, on denominational loyalty to attract students and, second, on denominational philanthropy that was rarely a sufficient source of revenue. Such institutions remained small and poorly funded so that, over time, they became increasingly noncompetitive in relation to those institutions which followed a different competitive strategy.

The second strategy was to gradually "secularize" an institution's governing board in order to increase its fiduciary linkages to merchant capital. This process began at Harvard in the mid-eighteenth century and, nationwide, it was well underway by 1860. The secularization of denominational governing boards was formally brought to conclusion between 1870 and 1890 and this essentially entailed a shift in the governance of higher institutions from clergymen to merchant capital.³⁶ Similarly, regulatory prescriptions and inducements were often adjusted in ways that allowed some curriculum development and teaching that translated the religious ideals of denominationalism into the humanist ideals of the secular liberal arts college.³⁷

In the midst of this transition, and outside the walls of academia, the regime of competitive capitalism entered a long-wave accumulation crisis that lasted from the Panic of 1873 through the Panic of 1893.³⁸ During this period, capital not only shifted from the merchant to the industrial sector, but was increasingly consolidated in the emergence of the modern corporation.³⁹ The economic, political, and cultural requirements of the new corporate regime, institutionalized during the ensuing decades, have often been called corporate liberalism. As these requirements were institutionalized in corporations, government administration, and popular culture, higher education was also reconstructed by industrial capitalists to facilitate these adjustments.⁴⁰

Most importantly, corporate requirements for more extensive higher education increased as a direct consequence of the need for more certified professionals, scientists, engineers, and basic research.⁴¹ Likewise, the expansion of national administrative capacities at home and the assertion of a new global military presence, created new public sector markets for military technologies, civil servants, and expert consultants.⁴² The result was a corporate reform movement that sought to move curriculum development and teaching away from cultural literacy toward professional literacy. Moreover, the emergence of a corporate accumulation regime created its own burst of underlying cultural support for a professional literacy movement. For as the frontier closed during the 1890s, the avenue of middle-class social mobility increasingly shifted from cheap land to

professional credentials, from westward expansion to higher education.⁴³

The new higher education regime was implemented as the governance process shifted from merchant capital to industrial capital, from competitive capital to monopoly capital. Furthermore, the main governance site also shifted from local boards of trustees, in competition with one another, to an interlocking directorate of private educational foundations seeking to standardize and coordinate higher institutional development. David N. Smith finds that during the corporate regime private foundations were the key intermediate organizations which systematically built the needs of monopoly capital into the structure of higher education.⁴⁴

The structural form of higher education created by the major foundations was anchored in planned scientific management and integrated systems theory.⁴⁵ Private foundations offered regulatory inducements to institutions (e.g., grants) and to individuals (e.g., pensions) to secure the industrialization of higher institutions. In fact, Frederick Rudolph concludes that strings-attached capital allocations were so important in local governance and administrative processes, that "philanthropic foundations became an apparent or hidden presence on every American campus."⁴⁶

Indeed, the application of scientific management to the administrative process was so successful that by the end of the 1920s, American universities had established "patterns of structure, intellectual organization, and financing that are

still recognizable today."⁴⁷ Furthermore, a managerial revolution in the administrative process encouraged the emergence of a new type of managerial president. Hence, as educational administrators came to view universities as business corporations, subject to standardized measures of "academic efficiency" and market performance, administrative prescriptions on curriculum development and teaching helped to crush competing views of curriculum and teaching.⁴⁸

During this transition, however, capitalist economies slid into another long-wave accumulation crisis from 1917 to 1948.⁴⁹ Despite the on-going corporate rationalization of production (i.e., scientific management), private capital was unable to stem a new tendency for the rate of profit to fall. The newly rising organic composition of capital made it increasingly necessary to maintain optimum production levels through planned markets and by avoiding unnecessary competition. However, to the degree that private corporations were unable to directly implement this strategy, they called upon the national state to coordinate capitalist development. A strategy of state coordinated capitalist development was implemented mainly through partnerships between finance capitalists and state executive officials.

In a similar manner, the increasing organic composition of educational capital (e.g., libraries, buildings, laboratories) finally culminated in the first massive fiscal crisis for American higher education. Private foundations initiated a simultaneous movement to "systematize" American higher education,

particularly as finance capitalists rose to prominence in the governance process. Systematization was a rationalization strategy that sought to link individual institutions into stratified "niche markets" for professional and technical labor, information, and basic research.⁵⁰ Thus, whereas scientific management sought to maximize returns on capital investment through internal efficiencies, systematization sought to increase returns by establishing finely tuned market specializations.

Foundations initiated this process through planned, concentrated, capital allocations designed to create national market leaders in selected niche markets (e.g., Harvard in law, M.I.T. in engineering, Columbia in psychology, etc.). Ernest Hollis's 1938 study of philanthropy found that foundations were in fact highly successful in applying their policies of concentration.⁵¹ The key to this strategy of perpendicular development was to raise the standards of funding competitive research, journals, professional associations, hospitals, laboratories, and libraries so that most institutions could not compete, for example, in retaining research scholars or in maintaining a first-rate law school. As this competitive gap widened, institutional survival required most colleges to drop out of the competition or to find their own local, specialized market niche within the new system.⁵²

Nevertheless, as in the larger corporate economy, private capitalists (i.e., foundations) were unable to fully realize the benefits of systematization through the operations of a free market. Thus, operating in conjunction with the foundation's

inducements and local administrative prescriptions, a federal survey movement was launched soon after World War I to coordinate the creation of a national higher education system. During this transition, the federal survey movement operated mainly as an adjunct to corporate planning and to private foundation inducements by removing institutional and political barriers (i.e., market imperfections) that were hindering the transition from a competitive to a planned corporate regime. Likewise, the federal government intervened to facilitate voluntary accords between finance capital and competing groups such as agriculture, local capital, and intellectuals.

However, the total collapse of capitalist economies during the 1930s, resulted in direct state intervention in the production process for the first time. The consequence by 1948 was the shift from a corporate to a state-capitalist accumulation regime. By underwriting the costs of capitalist production in the most concentrated sectors of the economy, the state contributed to raising the rate of profit for the monopolies and, hence, stimulated post-war phase of economic development.⁵³ Whereas European states have heavily subsidized direct cost inputs with nationalized enterprises (e.g., natural resources and transportation), U.S. state-capitalism has tended more to absorb the input costs of labor (i.e., manpower training) and product development (i.e., basic and applied research) through expanded subsidies to higher institutions. Thus, the dramatic expansion of "public" higher education after World War II was a key support

mechanism in the construction of a U.S. state-capitalist accumulation regime.⁵⁴

The rationale for these "social capital" outlays is that each dollar of state expenditure on manpower training or applied research adds to the economy's long-run productive capacity. As the economy grows and incomes rise, the state realizes a return on its investment through higher tax revenues. However, the dominance of this policy rationale has meant that in order to maximize its return on higher education, the state must continually allocate inducements toward curriculum development and labor processes that feed directly into the production of additional economic growth. Consequently, the actual result of public higher education has not been its "democratization," but its vocationalization. This trend may be conceptualized as a shift from a curriculum that emphasized professional literacy to one that emphasizes technical literacy. Technical literacy has entailed a movement away from the liberally educated professional toward narrower vocational and technical specialization. In the process, the dominant structural form of higher education has moved from the university to the multiversity.

Needless to say, during the state-capitalist regime, the dominant site of higher education governance has passed from the private foundations to the state. Strategic policy objectives and master plans are now typically developed by commissions, which though formally "public," are dominated by a partnership of finance capitalists, state technocrats, and legislative elites.⁵⁵ Moreover, the new governance regime has resulted in an

administrative process that increasingly shifts the actual management of institutions to state technocrats who must administer standardized legislative mandates and state-wide master plans.

Class Struggle and Uneven Development

It is important to highlight that while one can link the historiography of higher education to a theory of capitalist development, the structural forms of higher education are the historical products of class struggle. In this respect, a historiography of American higher education, or even the history of particular higher institutions, will be incomplete unless one incorporates three additional concepts into the actual historical analysis. The concepts of uneven development, class struggle, and cumulative development are always necessary to explain those instances and degrees to which development processes deviate from the ideal-types established by a theoretical model.

The so-called law of uneven development points to the fact that capitalist development tends to occur first in specific geographic regions. Thus, other regions of a country or state typically lag behind the most developed areas or, in the case of the antebellum South, develop altogether different modes of production. Consequently, to the extent that higher institutions are mainly dependent on their ability to attract local patronage, the dominant structural form in any particular region may differ from that of the nationwide norm. Likewise, as a consequence of

intra-class struggles between different fractions of capital, many individual institutions (e.g., denominational) will effectively resist the developmental process, particularly if declining fractions of capital remain dominant in a specific region or locale. Moreover, the institutional division of labor instituted during the corporate and state-capitalist regimes, has produced a stratified system of higher institutions designed to mollify competition within capital by preserving "traditional" institutions that serve the interests of subordinate fractions.

Second, during the transition from one structural form of higher education to another, levels of class struggle tend to escalate as institutional reorganization is challenged with demands from competing classes (e.g., intellectuals, farmers, labor). Again, it should be observed that regulatory inducements and administrative prescriptions can asymmetrically reward or punish different types of curriculum development, teaching, and research, but these activities cannot be controlled through the governance process. Thus, there is always slippage within regulatory structures that allow competing processes of curriculum development and teaching to exist. Furthermore, despite its dominance over educational patronage and the administrative process, capitalists never wield a complete monopoly over patronage inducements or administrative prescriptions. Consequently, some patronage inducements are nearly always available to scholars and teachers who challenge the dominant processes, while administrative prescriptions are never always exercised against those who challenge them.

Finally, the outcome of uneven development and class struggle is a cumulative process of institutional development that generates zones of regulatory slippage. In real history, no structural form is ever completely superceded by its successor. Instead, structural forms of the curriculum process, teaching, governance, and administration tend to cumulate one on top of another so that what finally emerges is a complex structural form organized in hierarchical layers. For example, one can identify dominant governance sites with the sources of education policy; yet, the actual process of governance is now hierarchically layered among state agencies, private foundations, and local governing boards. Similarly, administration is layered among state technocrats, institutional managers, and faculty guilds. Consequently, the curriculum process is also layered hierarchically by the subordination of cultural literacy to professional literacy, and of professional literacy to technical literacy. Hence, the historical consequence of cumulative development has been to create a cycle in which higher institutions respond, on the one hand, to ever escalating demands that they educate more students and, on the other, to the requirements that they introduce more expensive technologies, add more plant capacity, and keep up with printed and electronic materials. Meanwhile, the periodic downturns of the business cycle inexhorably set off a fiscal crisis, followed by a rationalization movement designed to eliminate "inefficiencities" and to insure that universities are run ever more like state-capitalist enterprises.

ENDNOTES

1. Karl Marx and Frederick Engels, The German Ideology (New York: International Publishers, 1979), p. 64.
2. Roger L. Geiger, To Advance Knowledge: The Growth of American Research Universities, 1900-1940 (New York: Oxford University Press, 1986), pp. vi-vii.
3. Claus Offe, "The Theory of the Capitalist State and the Problem of Policy Formation," in Leon Lindberg, ed., Stress and Contradiction in Modern Capitalism (Lexington, Mass.: Lexington Books, 1975, pp. 125-44.
4. Marx and Engels, The German Ideology, p. 64.
5. Ernest Mandel, Long Waves of Capitalist Development: The Marxist Interpretation (Cambridge: Cambridge University Press, 1980).
6. Paul A. Baran and Paul M. Sweezy, Monopoly Capital: An Essay on the American Economic and Social Order (New York: Monthly Review Press, 1966), pp. 219-26. For a theoretical analysis see, Goran Therborn, Science, Class and Society (London: New Left Books, 1976), pp. 355-362.
7. James O'Connor, The Meaning of Crisis: A Theoretical Introduction (New York: Basil Blackwell, 1987), Chap. 2.
8. Michel Aglietta, A Theory of Capitalist Regulation: The US Experience (London: New Left Books, 1979). Cf. David Gordon, "Stages of Accumulation and Long Economic Cycles," Pp. 9-45 in T. Hopkins and I. Wallerstein, eds., Processes of the World

System (Beverly Hills: Sage Publications, 1980); David M. Kotz, "A Comparative Analysis of The Theory of Regulation and the Social Structure of Accumulation Theory," Science and Society Vol. 54, no. 1 (Spring 1990): 5-28..

9. For example, see Friedrich Engels, "Letters on Historical Materialism," in Robert C. Tucker, ed., The Marx-Engels Reader, 2nd Edition (New York: W. W. Norton, 1978), pp. 760-68; Karl Marx, A Contribution to the Critique of Political Economy (New York: International Publishers, 1970), pp. 20-21.

10. This periodization is based on David M. Gordon, Richard C. Edwards, and Michael Reich, Segmented Work, Divided Workers (Cambridge: Cambridge University Press, 1982). On the concept of hegemony see, Bob Jessop, "Accumulation Strategies, State Forms, and Hegemonic Projects," Kapitalistate Vol. 10-11 (1983): 89-112; Also, see Michael W. Apple, Ideology and Curriculum (New York: Routledge and Kegan Paul, 1990).

11. Douglas C. North, The Economic Growth of the United States, 1790-1860 (New York: W. W. Norton, 1966).

12. Alfred D. Chandler, Strategy and Structure (Cambridge: MIT Press, 1962); Stuart Ewen, Captains of Consciousness: Advertising and the Social Roots of the Consumer Culture (New York: McGraw-Hill, 1976);

13. James O'Connor, The Fiscal Crisis of the State (New York: St. Martin's Press, 1973).

14. James O'Connor, Accumulation Crisis (New York: Oxford University Press, ???).

15. Kotz, "A Comparative Analysis," p. 9.

16. Michael W. Apple, ed., Cultural and Economic Reproduction in Education: Essays on Class, Ideology, and the State (London: Routledge, and Kegan Paul, 1982), see particularly the essays by David Hogan, Martin Carnoy, and Roger Dale.

17. Thorstein Veblen, The Higher Learning in America: A Memorandum on the Conduct of Universities by Businessmen (New York: Sagamore Press, 1957), p. 18.

18. Adam Smith, An Inquiry into the Nature and Causes of The Wealth of Nations (New York: Modern Library, 1965), pp. 120-25.

19. Richard Hofstadter and Walter P. Metzger, The Development of Academic Freedom in the United States (New York: Columbia University Press, 1955), pp. 460-64.

20. Aglietta, Theory of Capitalist Regulation, p. 19.

21. The following periodization of higher education owes a great debt to Smith, Who Rules the Universities?, pp. 139-42.

22. The concept of "economic conditioning" is explained in Clyde W. Barrow, "Styles of Intellectualism in Weber's Historical Sociology," Sociological Inquiry vol. 60, no. 1 (February 1990): 47-61.

23. Veblen, The Higher Learning, p. 48.

24. Andre Gorz, Critique of Economic Reason (New York: Verso, 1989), p. 35; Cf. James G. Anderson, Bureaucracy in Education (Baltimore: Johns Hopkins Press, 1968).

25. Craig Kaplan and Ellen Schrecker, Regulating the Intellectuals: Perspectives on Academic Freedom in the 1980s

(New York: Praeger Press, 1983).

26. Barbara Ann Scott, Crisis Management in American Higher Education (New York: Praeger Press, 1983).

27. For example, see Frances Fox Piven and Richard A. Cloward, Poor People's Movements: Why They Succeed, How They Fail (New York: Vintage Books, 1979).

28. Ralph Miliband, The State in Capitalist Society (New York: Basic Books, 1969), p. 182.

29. Donald G. Tewksbury, The Founding of American Colleges and Universities Before the Civil War (Hamden, Conn.: Archon Books, 1965).

30. For example, Ronald Story, The Forging of an Aristocracy: Harvard and the Boston Upper Class (Middletown: Wesleyan University Press, 1980); E. Digby Baltzell, Philadelphia Gentlemen: The Making of a National Upper Class (New York: Free Press, 1966).

31. Brubacher and Rudy, Higher Education in Transition, p. 72.

32. E. Digby Baltzell, The Protestant Establishment: Aristocracy and Caste in America (New York: Vintage, 1966).

33. Brubacher and Rudy, Higher Education in Transition, p. 71.

34. Veblen, The Higher Learning, pp. 48, 47.

35. All references to the social composition of governing boards from Clyde W. Barrow, Universities and the Capitalist State (Madison: University of Wisconsin Press, 1990), Chap. 2.

36. Earl J. McGrath, "The Control of Higher Education in

America," Educational Record 17 (April 1936):259-72; Barrow, Universities, pp. 46-50.

37. The best illustration of this development is John Barnard, From Evangelicalism to Progressivism at Oberlin College, 1866-1917 (Columbus: Ohio State University Press, 1969); Likewise, George E. Peterson, The New England College in the Age of the University (Amherst: Amherst University Press, 1964).

38. Eric Hobsbawm, "The Crisis of Capitalism in Historical Perspective," Socialist Revolution 6 (October/December, 1976): 77-96.

39. Baran and Sweezy, Monopoly Capital.

40. The economic, political, and cultural requirements of corporate liberalism are addressed, respectively, by David Noble, America by Design: Science, Technology, and the Rise of Corporate Capitalism (New York: Alfred A. Knopf, 1977); James Weinstein, The Corporate Ideal in the Liberal State: 1900-1918 (Boston: Beacon Press, 1968); R. Jeffrey Lustig, Corporate Liberalism: The Origins of Modern American Political Theory, 1890-1920 (Berkeley: University of California Press, 1982).

41. Jay M. Gould, The Technical Elite (New York: Augustus M. Kelley, 1966); W.H.G. Armytage, The Rise of the Technocrats: A Social History (London: Routledge and Kegan Paul, 1965).

42. A. Hunter Dupree, Science in the Federal Government: A History of Policies and Activities to 1940 (Cambridge: Harvard University Press, 1957); Ronald C. Tobey, The American Ideology of National Science, 1919-1930 (Pittsburgh: University of Pittsburgh Press, 1971).

43. Burton J. Bledstein, The Culture of Professionalism: The Middle Class and the Development of Higher Education in America (New York: W. W. Norton, 1976); David O. Levine, The American College and the Culture of Aspiration, 1915-1940 (Ithaca: Cornell University Press, 1986).

44. David N. Smith, Who Rules the University?: An Essay in Class Analysis (New York: Monthly Review Press, 1972), p. 98, see esp. Chaps. 3-5.

45. Samuel Haber, Efficiency and Uplift: Scientific Management in the Progressive Era, 1890-1920 (Chicago: University of Chicago, 1964).

46. Frederick Rudolph, The American College and University: A History (New York: Alfred A. Knopf, 1968), p. 431.

47. Roger L. Geiger, To Advance Knowledge: The Growth of American Research Universities, 1900-1940 (New York: Oxford University Press, 1986), pp. 1-2.

48. Barrow, Universities and the Capitalist State, Chaps. 7-8.

49. Hobsbawm, "The Crisis of Capitalism in Historical Perspective."

50. Barrow, Universities and the Capitalist State, Chaps. 3-6.

51. Hollis, Philanthropic Foundations, p. 275.

52. GEB, Annual Report of the General Education Board, 1928-1929 (New York, 1929), p. 7.

53. Richard Scase, ed., The State in Western Europe (New York: St. Martin's Press, 1980), pp. 12-16.

54. James O'Connor, The Fiscal Crisis of the State (New York: St. Martin's Press, 1973), Chap. 4.

55. G. William Domhoff, The Powers That Be: Processes of Ruling Class Domination in America (New York: Vintage Books, 1979), pp. 87-93.

THE STRUCTURAL FORMS OF AMERICAN HIGHER EDUCATION

STRUCTURAL FORM	COLLEGE	UNIVERSITY	MULTIVERSITY
ACCUMULATION REGIME	COMPETITIVE	CORPORATE	STATE-CAPITALIST
accumulation regime ^a	1815-1896	1896-1946	1946-present
accumulation crisis ^b	1873-1893	1917-1946	1975- ????
GOVERNINANCE PROCESS			
dominant fraction governance site	merchant trustees	industrial foundations	finance state
CURRICULUM DEVELOPMENT	cultural literacy	professional literacy	technical literacy
ADMINISTRATIVE PROCESS			
personnel organization	clergy guild	managers corporate	technocrats bureaucratic
LABOR PROCESS	craft	industrial	automated

NOTES: ^aPeriodization derived from David M. Gordon, Richard C. Edwards, and Michael Reich, Segmented Work, Divided Workers (Cambridge: Cambridge University Press, 1982).
^bDerived from Eric Hobsbawn, "The Crisis of Capitalism in Historical Perspective," Socialist Revolution 6 (1976): 77-96.